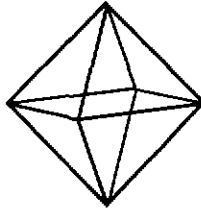


US EPA ARCHIVE DOCUMENT

Jonathan C. Cherry, P.E.
Project Manager
Kennecott Eagle Minerals Company
1004 Harbor Hill Drive
Suite 103
Marquette, Michigan 49855
Phone: 906-225-5791
Email: Cherryj@Kennecott.com



Kennecott Eagle Minerals

April 20, 2007

Ms. Rebecca Harvey
United States Environmental Protection Agency
Water Division (WQ-16J)
77 West Jackson Blvd.
Chicago, IL 60604-0359

RECEIVED

APR 24 2007

UIC BRANCH
EPA REGION 5

Dear Ms. Traub:

Re: Eagle Project – Class V Permit Application

Kennecott Eagle Minerals Company is providing to the U.S. Environmental Protection Agency the enclosed *Class V Permit Application* under the federal Safe Drinking Water Act. This application is for the infiltration of treated mine dewatering water and stormwater at the proposed underground nickel and copper mine referred to as the Eagle Project. The water will meet all drinking water standards prior to infiltration, posing no risk of impact to underground sources of drinking water. Please note that the Michigan Department of Environment Quality (MDEQ) has also reviewed the discharge under the State of Michigan's Groundwater Discharge Permit Program and has proposed to approve the discharge. This application is based on information that was provided to the MDEQ.

Should you have any questions please do not hesitate to contact me at 906-225-5791.

Sincerely,

Jonathan C. Cherry, P.E.
Project Manager

MT-103-5W20-0002

Distribution List

- 2 Rebecca L. Harvey (WU-16J)
U.S. Environmental Protection Agency,
Region 5
77 West Jackson Blvd.
Chicago, IL 60604-3590
- 1 Steve Roy
U.S. Environmental Protection Agency,
Region 5
77 West Jackson Blvd.
Chicago, IL 60604-3590
- 4 Mr. Jon Cherry
Kennecott Eagle Minerals Company
1004 Harbor Hills Dr, Ste 103
Marquette, MI 49855
- 2 Mr. Gene Smary
Warner, Norcross & Judd, LLP
900 Fifth Third Center,
111 Lyon Street N.W.
Grand Rapids, MI 49503-2489
- 2 Mr. Steve Donohue
Foth Infrastructure & Environment, LLC
2737 South Ridge Road, Ste 600
P.O. Box 12326
Green Bay, WI 54307-2326



April 20, 2007

Mr. Jon Cherry, P.E.
Project Manager
Kennecott Eagle Minerals Company
1004 Harbor Hills Drive, Ste 103
Marquette, MI 49855


Dear Mr. Cherry:

Re: Eagle Project – Class V Permit Application

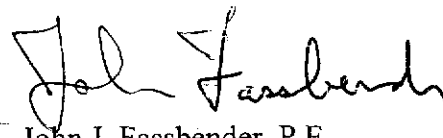
Foth Infrastructure & Environment, LLC (Foth) is providing to you the enclosed *Class V Permit Application* for the Eagle Project. This application has been prepared in accordance with U.S. Environmental Protection Agency requirements. The required USEPA application form is included after this letter.

Sincerely,

Foth Infrastructure & Environment, LLC



Stephen V. Donohue, P.H.
Senior Project Manager



John J. Fassbender, P.E.
Lead Engineer



United States Environmental Protection Agency

Underground Injection Control Permit Application

(Collected under the authority of the Safe Drinking Water Act. Sections 1421, 1422, 40 CFR 144)

AK ID Number

TIA	C
-----	---

C

Read Attached Instructions Before Starting
For Official Use Only

Application approved mo day year	Date received mo day year	Permit Number	Well ID	FINOS Number


E. Corbin		Operator Name	
Owner Name Kennebecott Eagle Minerals Company		Owner Name Same as owner	
Street Address 1004 Harbor Hills Dr. Suite 103		Phone Number (906) 225-5791	Phone Number
City Marquette	State MI	ZIP CODE 49855	ZIP CODE

IV. Comments	V. Ownership	Contact	VII. SIC Codes
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Private <input type="checkbox"/> Federal <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator	10, 1021, 1099, 1041

<div style="text-align: right;">Status: (Mark "x")</div>			
<input type="checkbox"/> A Operating	Date Started mo day year <hr/>	<input type="checkbox"/> B. Modification/Conversion	<input checked="" type="checkbox"/> C. Proposed

<input type="checkbox"/> A. Individual <input checked="" type="checkbox"/> B. Area		Number of Existing Wells <div></div>	Number of Proposed Wells 1	Name(s) of field(s) or project(s) Eagle Project - Treated Water Infiltration System
--	--	---	-------------------------------	--

Class and Type of Well (see figure)		
A. Class(es) (enter code(s))	B. Type(s) (enter code(s))	C. If class is "other" or type is code 'x,' explain D. Number of wells per type (if area permit)
V	X	Underground infiltration system for treated water. 1

Approximate Center of												Mark 'x'			
Latitude			Longitude			Township and Range								 Yes No	
Deg	Min	Sec	Deg	Min	Sec	Sec	Twp	Range	1/4 Sec	Feet From	Line	Feet From	Line		
46	44	55	87	53	43	12	50 N	29 W	NW						


XII. Attachments

(Complete the following questions on a separate sheet(s) and number accordingly; see instructions)

For Classes I, II, III, (and other classes) complete and submit on a separate sheet(s) Attachments A-U (pp 2-6) as appropriate. Attach maps where required. List attachments by letter which are applicable and are included with your application.

XIV. Continued

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

A. Name and Title (Type or Print) Jonathan C. Cherry, P.E. - Project Manager	B. Phone No. (Area Code and No.) (906) 225-5791
C. Signature 	D. Date Signed 4-20-07

Eagle Project
Class V Permit Application

Project ID: 04W018

Prepared for
Kennecott Eagle Minerals Company
ISO 14001:2004 Registered System

Prepared by
Foth Infrastructure & Environment, LLC

April 2007

Eagle Project Class V Permit Application

Contents

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Appendix

Appendix A	Hydrogeologic Report for the Eagle Project Groundwater Discharge Permit Application
Appendix B	Mine Water Sources and Characteristics
Appendix C	Wastewater Treatment System and Estimated Effluent Quality to be Discharged to the Treated Water Infiltration System
Appendix D	Treated Water Infiltration System – Discharge Management Plan
Appendix E	Groundwater Modeling of the Treated Water Infiltration System
Appendix F	Proposed Monitoring Plan

Figures

Figure 1	Project Location
Figure 2	Site Location Map

1. Introduction

This *Class V Permit Application* has been prepared in accordance with applicable sections of United States Environmental Protection Agency's (USEPA) instructions. The information contained in this document has been previously provided to the Michigan Department of Environmental Quality (MDEQ) in a February 2006 document entitled *Eagle Project – Groundwater Discharge Permit Application*. This *Class V Permit Application* is being submitted in response to letters from USEPA (dated January 31, 2007 and March 22, 2007) to Kennecott Eagle Minerals Company (KEMC) stipulating that the infiltration of treated water from the Eagle Project through the treated water infiltration system (TWIS) will require a Class V Permit.

In preparing this application, the *Class V Permit Application Instructions* were followed. Several sections documented in the instructions are not applicable to this application since the project has not yet been constructed and the requested material is not applicable to the Eagle Project. The following summarizes specific sections from the instructions that are not presented in this document:

- ♦ ✓C – Corrective Action Plan and Well Data (not applicable for Class V).
- ♦ ✓I – Formation Testing Procedures (not applicable for Class V).
- ♦ ✓J – Stimulation Program (not applicable).
- ♦ ✓L – Construction Procedures (not applicable for Class V).
- ♦ ✓N – Changes in Injected Fluid (not applicable for Class V).
- ♦ ✓O – Plans for Well Failures (not applicable for Class V).
- ♦ ✓S – Aquifer Exemptions (not requested).

2. Map of Well/Area and Area of Review

Figure 1 shows the location of the proposed Eagle Project. Figure 2 presents a USGS topographic map which depicts a 1-mile radius around the proposed TWIS. In addition, proposed water supply wells, discharge structures and piping within ¼ mile of the proposed TWIS are shown on Figure 2. There are no public or private wells, or hazardous waste treatment storage and/or disposal areas within ¼ mile of the proposed TWIS.

Property ownership within ¼ mile of the TWIS is shown on Figure 1. The following is a list of adjacent property owners:

Michigan Department of Natural Resources
Land and Mineral Services Division
P.O. Box 30448
Lansing, MI 30448

Plum Creek
P.O. Box 1008
7100 County 427 M.5 Road
Escanaba, MI 49829-6008

Longyear Realty Corporation
210 Front Street
Marquette, MI 49829-6008

3. Maps and Cross Section of USDWs and Geologic Structure of Area

A hydrogeologic report for the Eagle Project's groundwater discharge system is provided in Appendix A. This report provides information on the following:

- ♦ Methods of investigation,
- ♦ Well head protection areas and surrounding domestic wells,
- ♦ Information of site geology,
- ♦ Information on regional aquifers and underground sources of drinking water (USDW),
- ♦ The patterns of regional groundwater flow,
- ♦ Hydraulic characteristics of the geologic formations,
- ♦ Geologic cross sections,
- ♦ Potentiometric surface maps,
- ♦ Borings logs, etc.

4. Operating Data

A description of the sources of water from the mining operations is provided in Appendix B. This appendix contains water balance information and water chemistry data on the water that will be treated at the waste water treatment plant (WWTP). Appendix C contains information on the water treatment system and expected effluent quality. Appendix D contains information on the design and operation of the TWIS. Appendix E contains information on the modeling of groundwater flow from the TWIS.

5. Infiltration Procedures

Information regarding the infiltration procedures is summarized in a *Discharge Management Plan for the Treated Water Infiltration System* contained in Appendix D.

6. Construction Details

Information regarding construction details for the infiltration system are summarized in a *Discharge Management Plan for the Treated Water Infiltration System* that is contained Appendix D. The general location of the TWIS is shown on Figure 2. The TWIS has not been constructed, therefore information regarding its construction and operational history is not available.

7. Monitoring Program

The monitoring program for the TWIS is provided in Appendix F.

8. Plugging and Abandonment Plan

The TWIS will be decommissioned at the end of the underground mine operations (approximately 12-17 years after site construction begins). Reclamation of the TWIS will include removal of all piping and mechanical systems and regrading and revegetating the infiltration cell areas. Plastic piping will be disposed at an approved landfill.

9. Necessary Resources

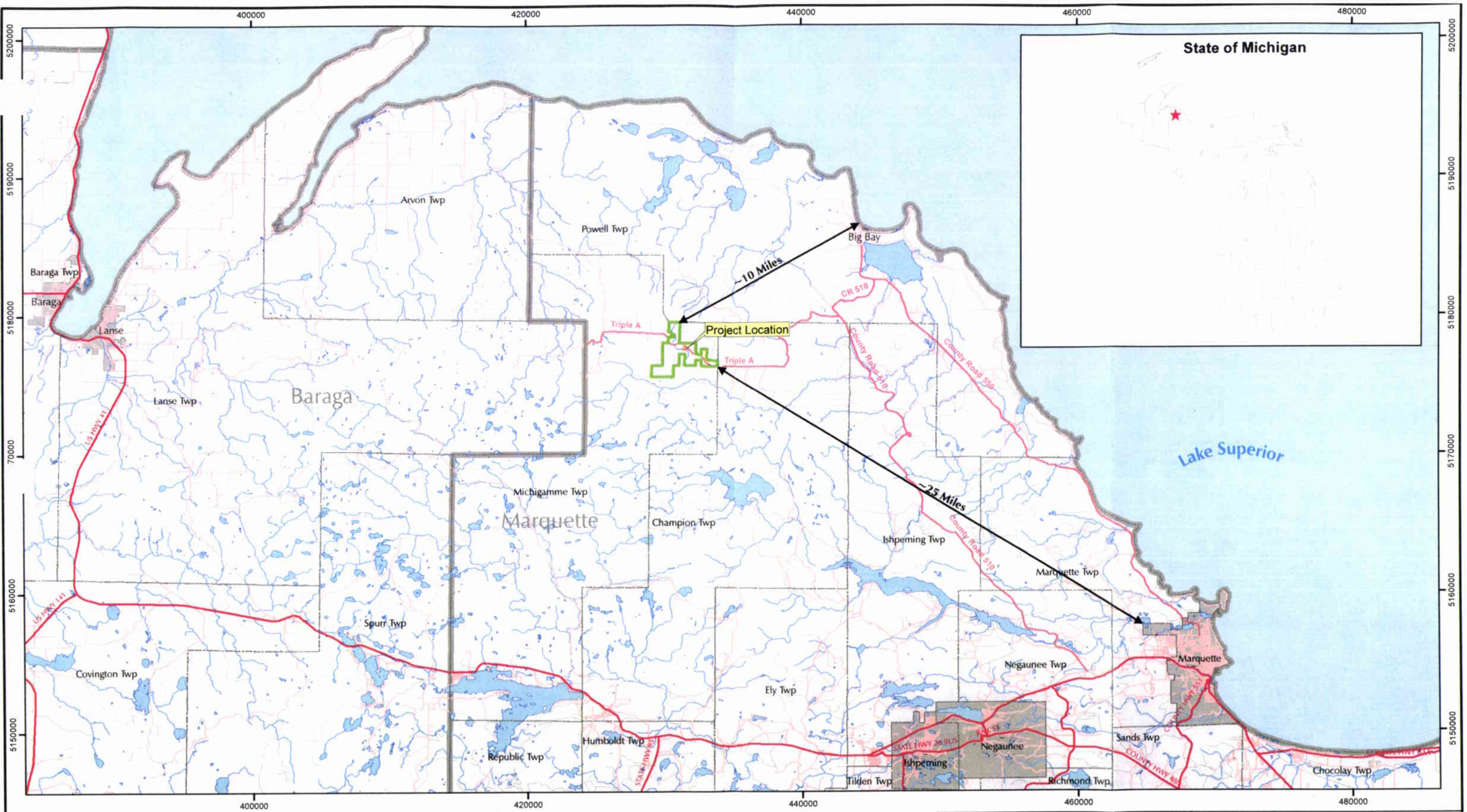
KEMC will provide financial assurance in the amount of approximately \$17,000,000 to the State of Michigan for site reclamation (including the TWIS) and monitoring pursuant to Part 632 of the State of Michigan Natural Resources and Environmental Protection Act and administrative rules promulgated under R 425.101 et.seq. KEMC will select a financial assurance instrument that meets the requirements of R 425.302.

10. Existing EPA Permits

There are no other USEPA permits required for the project.

11. Description of Business

The Eagle Project is a proposed facility for mineral extraction. There will be no milling or chemical processing of ore at the Eagle Project site.



NOTES

- Surface property boundary as of November 18, 2004 supplied by Kennecott via Golder & Associates Inc., August, 2005.
- Horizontal datum based on NAD 83/94.
- Horizontal coordinates based on UTM Zone 16.
- All base information downloaded from Michigan Center of Geographic Information (<http://www.michigan.gov/cgi>).
- Site Location - Project Site within Sections 11 & 12, T50N, R29W, Town of Michigamme, Marquette County, Michigan.

LEGEND

- Counties
- Minor Civil Divisions
- Kennecott Surface Ownership
- Lakes and Rivers
- Highways
- Major Roads
- Minor Roads



Foth Infrastructure & Environment, LLC

REVISED	DATE	BY	DESCRIPTION
CHECKED BY:		JOS1	DATE: FEB '06
APPROVED BY:		SVD1	DATE: FEB '06
APPROVED BY:			DATE:



Kennecott
Eagle Minerals

FIGURE 1
PROJECT LOCATION

Scale: Miles

Date: FEBRUARY, 2006

Prepared by: DAT

Scope: 04W018

